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A Study to Determine Effects of parental Involvement on NJROTC Cadets' Grade Point Averages at Maury High School

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A STUDY TO DETERMINE EFFECTS OF PARENTAL INVOLVEMENT ON NJROTC CADETS' GRADE POINT AVERAGES AT MAURY HIGH SCHOOL

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APPROVAL PAGE

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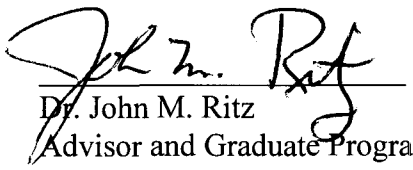
APPROVAL BY:  5-21-98

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Linda Elaine Fox

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INTRODUCTION

Through the many years of education that a child receives, there are many times when a teacher is concerned about the parental support at home. In some instances, the concern is warranted. Although, every child in America has the right to a good education, these same children have many different environments from which they come to school.

Schools today must teach all children with all types of backgrounds. In today's society the ever-changing family background unit is always a challenge to the classroom teacher. The "Ozzie and Harriet" or "Leave It to Beaver" functional family model rarely exist anymore. In fact, there may exist as many family units and varied backgrounds as there are students in the classroom.

Teachers need to realize that students often have difficulties getting required classroom materials to enable them to come to school ready to learn. Educating a student today takes much more than just the teacher teaching the daily lessons. It also takes parents who are responsible and willing to help the child succeed in school. The environment in which the child is raised says many things about that child. A strong family background will give the added support needed for a child to succeed in school and in life. If a child has one or no parents at home who will support them during a crucial time of their lives, who fills the gaps? When does the teacher realize that if they do not help the child, because the parents cannot or will not, the child will be the one who will suffer?

It is important that teachers know about a students background including their

daily academic challenges, family members, and type of support at home. Knowing this information will assist the teacher in developing plans to enable all children to achieve their highest potential.

STATEMENT OF THE PROBLEM

The problem of this study was to determine if there is a correlation between grade point averages (GPA's) and the number of parents living at home with Maury High School NJROTC Cadets.

RESEARCH GOALS

This study was used to gain information about the success rate of Cadets who have parental support at home and comparing it to their grade point averages. The hypothesis used to guide this research study was:

H1: Maury High School NJROTC Cadets will have a higher grade point average if they have two parents living at home with them.

BACKGROUND AND SIGNIFICANCE

Teachers are constantly faced with students who come to school not ready to learn. There are many reasons why they are not ready to learn, but one of the main reasons is lack of parental support. In today's world of ever-changing demographics of a family make up, a teacher sometimes becomes that surrogate parent whether they realize it or not.

Good relationships or connections with the child's school are an integral part of what they need for them to succeed academically. A study completed by Pryor (1995) shows that through family-school relationship studies done through questionnaires, focus groups and telephone interviews, students actually wanted their parents involved in their education. In this same study, parents expressed an interest in receiving more communication from the school and teachers wanted parents to be more involved in their child's education.

However, more than one study has determined there are correlations between student achievement and parental involvement in the school. Research has focused on many identifying factors that determine student success. Effective schools highlight parental involvement and cooperation which leads to higher achieving students. Hayes and Kamerman (1983) suggest that parents who have higher achieving students initiate more contact with their children's schools. Nevertheless, just because a student has two parents living at home does not necessarily mean they have the support they need to succeed. What if they have two parents in the household, but both work? What if they work different shifts and do not see the child for days? What motivates students to succeed even if they have no support? If a student has no one to go home to and get the support and necessary tools they need to be able to complete the assigned homework, then they may be in danger of failing and can become another statistic.

Data has shown that the stronger the school's programs to involve and promote parental involvement, the higher the ratings given by students of their schools. Research has shown that with appropriate parental guidance, better attendance rates and less

involvement in improper behavior violations, an overall success in academics was achieved. All of these factors are shown when students see teachers, counselors and administrators actively seeking parental involvement. This encourages them to be a more willing part of the student-parent team (Comer and Haynes 1991). Home-school interactions are a necessity in society if there is any chance of student success.

LIMITATIONS

The following limitations were used in conducting this research study:

1. This study was confined to actively enrolled Maury High School Naval Junior Reserve Officer Training Corps Cadets.

2. It was limited to Cadets who were enrolled as of February 1998 during the second semester of the 1997-1998 school year.

3. The cumulative grade point averages (GPA's) used were those at the end of the first semester of the 1997-1998 school year.

ASSUMPTIONS

The following assumptions were made concerning this study:

1. The grade point averages used in the study will be representative of final grade point averages.

2. Cadets know what their grade point average is and how important it is to them in obtaining scholarships and admission to the college of their choice.

3. Naval Science Instructors were aware of the importance of grade point

averages and informed Cadets routinely on working hard to obtain the best grades.

PROCEDURES

This research study was conducted to determine if there is a correlation between number of parents in the household and Maury High School Cadet grade point averages. This required obtaining their course credit sheets which have their cumulative grade point average listed. All Cadets in second semester of NJROTC showed their course credit sheets to the researcher. After careful review of the course credit sheets, Cadets were counseled on the importance of their GPA's and how to improve in areas of study needed to raise GPA's.

All Cadets who returned for the second semester of the 1997-1998 school year records were used to complete this study. Since all Cadets fill out a personal information card at the beginning of each semester, the family unit information was obtained from these cards.

DEFINITION OF TERMS

The following terms were relevant to the study conducted:

1. Cadet--An active student enrolled in the Naval Junior Reserve Officer Training Corps (NJROTC) program of instruction. This is an elective course of instruction.

2. Cumulative Grade Point Average. This is a cumulative average of all grades earned. It is based on a 4.0 scale where an "A" equals 4.0, a "B" equals a 3.0, a "C" equals a 2.0 and a "D" equals 1.0. All grades earned are then averaged together to get

their cumulative grade point average. A student, however, can obtain a higher than 4.0 GPA because of earning extra points upon the completion of Advanced Placement courses.

3. NJROTC--Naval Junior Reserve Officer Training Corps. An elective course of an instruction program which helps to build leadership skills and citizenship skills. It also creates patriotism awareness in the students. This program is in approximately 485 high schools throughout the country.

OVERVIEW OF CHAPTERS

In this chapter, the proposal was made that grade point averages are affected by the amount of parental support provided at home. The purpose of this study was to determine if there is a correlation between number of parents at home and GPA's. The problem has been identified and the hypothesis presented. Assumptions were also detailed. Procedures for collecting the information and data were given and definitions of terminology used throughout the study were explained.

In Chapter II, a review of relevant literature pertaining to the problem will be presented. Chapter III will explain the methods and procedures used to conduct the study. In Chapter IV, the findings of the study will be detailed. The summary, conclusions and recommendations of the study will be represented in Chapter V.

CHAPTER II

REVIEW OF LITERATURE

Chapter II is the Review of Literature. It is a review of cumulative grade point averages, parental involvement and the goals and objectives for Cadets in the Naval Junior Reserve Officer Training Corps (NJROTC) program.

CUMULATIVE GRADE POINT AVERAGES

The cumulative grade point average is a calculation of all grades earned by students in their courses of instruction starting in high school. Points are awarded on a scale of one to four with "A" earning 4 points, "B" earning 3 points, etc. All course grades are then averaged to get the grade point average or GPA. Colleges use these scores to aid in their selection process to decide who will be admitted into their school.

What students need to understand is that grade point averages are critical if they want to get into the college of their choice. Students also need to realize the importance of not slacking off during the last semester of their senior year (Watson, 1998). Students need to realize that colleges do look at all of their scores, not just at the time they are completing college applications. According to Watson, students seem to think it is over when it, in fact, is not over. The last semester of high school is not the time to kick the feet up and party down.

Another recent article in The Virginian Pilot (Watson, 1997) states the importance of the newly adopted GPA ruling for athletes. Students who enjoy sports and are active on the high school teams have now realized the importance of their GPA. A football

player at Maury High School had a 1.5 GPA and raised it to a 2.1 in one semester. He stated that he was not interested in school, only girls. Since his football career was in jeopardy, he realized he had to work harder. Study halls helped him raise his GPA and more work with his teachers helped him to understand his classes even better. Another football player stated that if he needed to pass only certain courses, that is all he did. Now he realizes the importance of the GPA rule since most colleges require a 2.0 or better to enter.

Another major factor affecting the GPA of students is their work hours. Singh (1998) portrays part-time employment of high schoolers and its effect on academic achievement. He suggests that part-time employment during the high school years has grown dramatically in the last decade. It has become a way of life for teenagers to spend their after school hours working at a job instead of working on their homework. Marsh (1991) found that time spent working displaced academic activities such as homework and engaging in after-school activities. With this, he found that work weakens the involvement in school and thus can result in poor academic performance. He concluded that the number of hours worked affected standardized testing.

The study of Lenarduzzi & McLaughlin (1996) also showed students working 10-20 hours per week had lower grade point averages and attendance. Students who had worked more than 20 hours per week had even lower test scores and more absences than other students who worked fewer hours or not at all. These studies have shown that students who do not do their homework or who are likely to fall asleep in class will certainly not do as well as those who get more practice by doing their assignments.

Research also shows that working during high school may have some positive outcomes (Steinberg, Greenberger, Garduque, Ruggiero, & Vaux, 1982). A student may gain an understanding of the world past high school. They may also become more mature and show an increase in autonomy. Earnings of post high school people who worked during high school are elevated by having had that work experience.

Still, how many students have to work to support the family? This can be a double edged sword for the family. The student wants to do well and make a better life for themselves. However, they must work to help the family put food on the table and buy the necessities to live. Families headed by single mothers are more likely to live in poverty. These children have a disability for education because of their poverty. The homes of poor children tend to provide little access to books, writing materials, computers and other support needed for a child to get better grades. These children are often afflicted by pain and disease, have poorer nourishment and tend to live in communities that have crime, gangs, and drugs. They must face problems in their personal lives because their parents or older siblings have left home, died, are incarcerated or lead seriously dysfunctional lives. All this means that the poorer children have a harder time in school than their more affluent peers.

Therefore, a critical balance is necessary between working and getting the education the child needs to improve their quality of life. If teachers and counselors know the background of the student, better recommendations may be made to assist the child and steer them in the right direction when it comes to courses and studying.

Something else that must be considered when evaluating grade point averages is

grade inflation. Grade inflation is not new to current times. Widespread inflation was rampant in the 1960s and reached alarming proportions in the middle of the 1970s. A study done by Levine (1987) showed that grades are inflated. Grades seem to differ between local area high schools and it is obvious they can differ greatly between colleges and universities that are states apart. A concern would surface if a company recruiter only looked at certain grades because they may interview someone whose grades were affected by grade inflation. If only a certain number of personnel were to be interviewed, the results of whom to hire could be in error. All corporations could be misled by grades that are inflated. If student grades do not show a true meaning of their ability, the company, of course, may suffer.

As grade point averages are measured, so must the colleges and companies look closely on how they were calculated. Of course, this is no easy task.

PARENTAL INVOLVEMENT

Research shows that parental involvement and empowering of the students could be reliably predicted. Many educators realize the importance of parental involvement in school activities. Griffin (1996) states that helping the student with homework is an integral part in helping the student succeed. Comer and Haynes (1991) found parental participation very important for effective learning and teaching. Schools that provide children the opportunities for positive interactions with adults and other schoolchildren would transfer to the child's home life and other learning environments and thus, help the student succeed academically. Schools who have a higher level of parental involvement

also had higher student test scores. Opposing this are schools having a higher percentage of African Americans, Hispanics, and students enrolled in the free-or-reduced-lunch program. They showed lower parental involvement and lower test scores.

In a rare study by Reynolds (1992), data was collected from parents, teachers and students about the perceptions of parental involvement. Reynolds also gathered data on reading and mathematics test performance. These participants were primarily from low-income, minority families. A 21-item scale was used which assessed the frequency of parent behaviors at school. These included participating at in-school activities and at home activities which included reading to the child. The study showed that parental involvement and the achievement tests have a low to moderate positive correlation. Teachers' perceptions of parental involvement had the highest correlations with student achievement. Despite the scores, the truth was that parental involvement significantly predicted student achievement in the years of the study. The findings of the study did support the contention that parental involvement is an important element in the students' academic success.

It clearly shows that school psychologists are interested in ways to enhance the educational outcomes of today's students (Christenson & Hurley, 1997). Recently, parental involvement has been positively identified as one way to improve the success of students in school. Many research studies have been done on parental involvement and much is known about this important facet in a child's education. Contributions of the home environment do elevate student achievement. When parents are involved in the child's schooling, students show an improvement in grades. Also when the parents are

involved in education, teachers are recognized by the parents for better interpersonal and teaching skills, evaluated higher on teaching performance by administration and show greater satisfaction with the job of teaching. Family life of high achieving students was characterized by strong parental encouragement of academic pursuits, warm interactions, clear and consistent limits, and constant monitoring of how the time was spent of the student. Parents of these high achievers felt responsible for helping their children gain knowledge and basic reading skills. They also communicated regularly with school personnel and were involved in school functions and activities. As a result of the congruence between the home and school, the conclusion was that the better the relationship between families and teachers, the higher the student achievement. On the other hand, the greater the discontinuity between home and school, the more the students' grades declined.

Parents who must work outside the home are not new to the nineties. Hayes and Kamerman (1983) presented a hypothesis which stated that because working mothers are at their jobs for much of the day and then return home to complete housework and other required chores, they may find it difficult to spend time with their children. Although they may have warm, caring relationships with their children, it is an obvious fact that they get to spend little time with the children and encourage them in their academic endeavors. Several studies showed that middle-class boys with employed mothers had lower test scores on academic achievement than boys with nonemployed mothers. If this is a single parent household, who is there to see to the completion of homework? Who will monitor the time spent watching the television or playing with friends instead of

being on task with their homework requirements? The explanation of the findings is not yet clear but the statement is clear: The working mother cannot devote much time to fostering their children's educational progress.

Parent-child interaction has been important in predicting school achievement. The effect of a parent working is associated with "time poverty" by which parents do not have the time to devote to the educational needs of their children. There has been an increasing recognition among parents and researchers that education and socialization take place at home, in school, on the playing fields of chosen sports, in and around the neighborhoods and many other places that children spend time during the week. Educational outcomes are based on the total experience and circumstances at home, in school and in the community. This is why it is imperative that a child receives the help they need at home to succeed in school. What is taught at school should be reinforced at home to help the child understand the importance of education.

Patterns of economic inequality surfaced during a study. It showed that the one-parent family was much more likely than two-parent families to be in the lower income groups. This is likely to cause one parent to be handling all of the support. If so needed, the child must then work to help ends meet. Again, this could be a double edged sword for the family.

Another study done by Griffith (1996) has shown correlations between student achievement and parent involvement in the school programs. This study suggested that the higher the parental involvement, the higher the performance level of the students. Effective urban schools suggest a definite relationship between involvement and

performance. It was indicative of higher-achieving schools.

Comparisons show there is a difference between high-achieving students and low-achieving students. These comparisons show that parental behaviors at home in supporting their children's education differed significantly between the two groups. The parents of the high-achievers had more contact with the school and engaged in more supporting activities such as helping with homework.

Wood (1992) tells about parents and teachers who have genuine control. They then release more energy which equates to much greater potential success for students. He also goes on to say that parents should be better consumers of their child's education. They should ask questions as to what the mission of the school is, how standardized tests are given, or how projects fit with the mission. He stresses to look beyond the simple answers given by the educational bureaucrats about percentages of test scores and find out what kids are really learning. He suggests to take a day off work and go to the school and see what is going on inside the walls of their child's future. Taking a day off work may be easier for some parents than others, especially if it is a single-parent household. Single parents may need every penny to put food on the table.

High schools can, and should increase their parental involvement. This is illustrated in a publication dedicated to high school improvement (High School Magazine, 1998). This shows what studies for decades have proven. Despite the greater need for independence, high school students' families do remain an important part of their academic success. Data revealed the stronger a school's program to involve the home, the higher they rated its overall quality. Different types of programs brought out

different parental levels of involvement but all showed the importance of the family getting involved.

Specifically realized is that the quality of parents' home involvement was significantly influenced by programs that better enabled them to assist their children on learning activities. The parental involvement at school was also significantly increased because of programs that recruited volunteers to share their time and talent with students. They were also asked to serve on committees for curriculum, climate, safety and other concerns.

Students who responded wanted practices that developed partnerships that respected the teens' increasing independence but at the same time, helped gain the information and strategies they needed to support and motivate their children. When students saw their teachers, counselors and parents all working to involve the parents, they were ready and willing to participate in student-parent and home-school interactions.

Parental efficacy and successful parental involvement are interrelated. Research has shown that specific teacher strategies in the areas of communication, shared learning, and guidance nurtured parental efficacy and strengthened parent-teacher relationships. Certainly if the parent-teacher relationships are strong, the student will be the winner in the academic war in life.

Rich (1997) suggests that parental involvement has been identified as one major element in the success of a school child. Her book states that it takes a lot of work and consistency to help our children progress through the school grades. What we do know is that when families are involved in the child's school, work improves and the schools also

improve. There has to be a learning environment at home when the children come home. A parent cannot just get the child dressed, fed and shoved out the door and think they are ready for the school day. An effective learning partnership must be created.

Rich also gives another effective way to help children with problems. A five-step approach to solving problems for parents and children is introduced. The first step is to find out what the problem is which can stem from a social skill problem or a simple math problem. The next step is to find out what the parent and child can do together to fix the problem. After that, decide what they should try first. Fourth, find out if it's working and finally, what should be done next? Of course, all of this takes time and time is critical. Spending time with a child and understanding what requirements they have should be on a consistent basis. Still, what happens if the time is not available because the parent or parents are both working?

Flaxman and Inger (1992) approach an idea that parental involvement would not solve everything. They state that parents and schools must clearly be partners in their children's education. They brought another point to light. They said that parents do not have to be well-educated themselves. Children from low-income and also minority families gain the most when schools involve the parents. Benefits are not confined to early childhood or the elementary grades. Positive effects occur when parents are involved all the way through high school. Involving the parents in their children's education improves student achievement and behavior. It is very hard to stress the importance of proper behavior and getting the best education possible if that same lecture is not heard in the home. Parental involvement then is another tool that will aid the

children of today succeed in the world they will walk alone in tomorrow. It is a mechanism that links society, schools and homes.

During school years, children look to parents for leadership in dealing with personal, peer and school pressures (Pipher, 1996). These many challenges involved guiding and nurturing the children throughout periods of intense change in self-social relationships that require parents to be extremely involved in their children's lives. Three major areas of guiding included communication, shared-learning activities and collaborative supervision and guidance (Epstein, 1995). These areas provided structure through which the families and schools could develop meaningful partnerships. These positive partnerships proved successful in helping their children succeed. Communication that is guided and purposeful can be a major force in helping parents and teachers grow as they attempt to be positive and helpful role models for their children (Bronfenbrenner, 1986).

The shared learning process offers multiple opportunities for parents and teachers to address some features of their relationships. These ideas could develop school strategies that would strengthen the children's talents and interests. These could be anywhere from drug-prevention to promoting healthy lifestyles. They are avenues that enhance parent, child and teacher well-being. This information of shared-learning activities can be directed toward learning and strengthening academic goals (Epstein, 1995).

Parents, teachers and students realize that the struggles they go through in their move toward adulthood should not disrupt the ties between family and schools.

Dornbusch and Ritter (1988) revealed that in a study of high school students, parents and teachers, it was found that fewer than 20 percent of these parents surveyed believed it was no longer important for them to be involved in their children's education. Eighty percent of the parents wanted to be more involved and over half the students surveyed wanted their parents involved as knowledgeable partners with schools.

More parenting, not more money is the key to success. Comments taken from speeches at a youth leadership conference said that "change will only occur if we insist on the importance of education in our lives, the lives of our children and the life of our communities. Without a total restructuring, there will be no improvement in our education system and the place to start is in the home. We cannot escape the fact that the single most important predictor of children's educational achievement - across all ethnic and racial groups - is parental involvement."

Every school child today is at-risk to some degree. It could be from a lack of support at home which could lead to drugs, gangs, alcohol abuse, sexually transmitted diseases or even the impact of a family separation. It is also true that teenagers from high-achieving families are not immune to these perils of life. Every family, regardless of socioeconomic status, must be involved in the raising of a child. This includes the education that they need to receive to be a valued member of society when they graduate from high school or even college. Parents should be involved on a daily basis. A study done by Swick and Broadway (1997) found that parents who maintained close ties with the school had children who had stronger academic records. They clearly show that parent and teacher communication is linked. Parents need to find time to devote to

school functions. They need to find a way to devote time to a very critical cause.

On the other hand, gifts should not be used as a token for their absences from the child's life. Time is more valuable than all the gifts they could receive. Having the parents at home to devote the time is another matter. The quality of time is more important than the quantity of time. If a parent must work, they should find ways to overcome obstacles that could affect their children. This is not as simple as it sounds and there could be a toss-up between time spent with the child and time spent at work. Which will get the food on the table?

NJROTC PROGRAM OBJECTIVES AND ENROLLMENT

The purpose of the Naval Junior Reserve Officer Training Corps (NJROTC) is to instill in students the values of citizenship, service to the United States, personal responsibility and a sense of accomplishment. It is the personal responsibility that is important for students to realize when they are doing their best in all areas of academics in school. One of the major objectives of the program is to promote high school completion. Not only do NJROTC units stress completion of high school, they stress the importance of getting the best possible grades to get into the college of their choice. Some students choose to enter the military and have the government subsidize their education, but again, a positive recommendation by the Naval Science Instructor is critical in getting into the Armed Services at an advanced pay grade.

Some Cadets eventually go on to college on scholarships provided to them if they successfully complete three or four years of the Naval Science curriculum. Even after

completion of three to four years of the curriculum, recommendations must still be made by their Naval Science Instructors.

Scholarships are extremely competitive and only those Cadets with a high GPA will have a chance of getting one. Full scholarships to the United States Naval Academy are possible for Cadets whom their instructors have nominated. Instructors may nominate a maximum of three per year to the academy, so grades and impeccable behavior are paramount. Naval Reserve Officer Training Corps (NROTC) scholarships are also available to Cadets who are successful in the program, provided, again, that their GPA is good enough to meet the college standards. This is another very competitive program and GPA's play an important part in getting into the college.

Another program objective is to instill habits of orderliness and precision and to develop respect for authority. This authority can be parents, teachers, administrators and other adults who help students succeed in daily academic life. Cadets who display proper conduct understand its importance to become academically successful.

SUMMARY

In Chapter II a review of relevant literature relating to grade point averages, parental involvement and the NJROTC program has been presented. This review entailed certain areas of interest such as how a student's job affects grades, the balance of parental involvement in school and earning income from their job, and how the three cornerstones of the NJROTC program help students learn to become better leaders and citizens. Chapter III will explain the methods and procedures used to collect data. Chapter IV will

present the study's findings and the summary, conclusion and recommendations will be contained in Chapter V.

CHAPTER III

METHODS AND PROCEDURES

Chapter III outlines the methods and procedures that were used in this study. It includes the discussion of the study's population, the research variables involved, the instrument used, the data collection methods and the statistical analysis procedure used.

POPULATION

The population of this study was limited to Norfolk, Virginia's Maury High School Naval Junior Reserve Officer Training Corps (NJROTC) Cadets who were enrolled as a regular student. This included 82 Cadets who were taking the Naval Science elective course of instruction in the second semester of school year 1997 - 1998. The grade level of these Cadets ranged from nine through twelve.

RESEARCH VARIABLES

The two independent research variables for this study were grade point averages (GPAs) and the number of parents living with the Cadet. The number of parents living with the Cadet equated to the amount of parental support the Cadet was given. GPAs were calculated on a 4.0 scale where the grade of "A" equaled 4.0, a grade of "B" equaled 3.0, etc. Students who took and successfully completed Advanced Placement (AP) courses received extra credit and these students could have conceivably attained higher than a 4.0 grade point average.

INSTRUMENT DESIGN AND USE

The first instrument used for this study was the Cadet's course credit sheets. The credit sheets used were those compiled after the first semester of the 1997-1998 school year. These credit sheets revealed all courses undertaken by the students. All grades earned for the courses were listed on the sheets with an average of these scores posted in the top right-hand corner. This was the student's cumulative grade point average. See Appendix A for an example.

The second instrument used in the study was the Cadet personal information card which was completed at the beginning of the semester. The number of parents living with the Cadet was obtained from these cards. See Appendix B for an example.

METHODS OF DATA COLLECTION

The first item to be collected was the cumulative grade point average of each Cadet in this study. These scores were obtained from the students' course credit sheets filed in their record in the guidance office. The student's copy of their course credit sheet was also presented to the instructor for honor roll verification. Cadets who achieve honor roll status are eligible for an academic ribbon to be worn on their uniform. All course credit sheets were checked twice for accuracy before calculation.

STATISTICAL ANALYSIS

Statistical analysis of the data was done by examining each student's grade point average (GPA) and numbers of parents living with the Cadet. The Pearson product

moment method was used to determine if there was a statistical degree of relationship between the two variables of the study.

SUMMARY

In Chapter III, a discussion of the methods and procedures was presented. It included the description of the population, the research variables used, all instruments used, the methods of data collection and a statistical analysis of the problem. A Pearson product-moment method was used to determine this correlation. Chapter IV will present the study's findings which will examine the information collected for the study. Chapter V will present the summary, conclusion and recommendation.

CHAPTER IV

FINDINGS

The problem of this study was to determine if there was a statistical degree of relationship between the grade point averages and the number of parents living with the Cadets who were enrolled in the second semester of Naval Science at Maury High School, Norfolk, Virginia in school year 1997-1998. This chapter presents the findings of the study and contains the table which illustrates all data used in the calculation of Pearson's r.

NARRATIVE

A comparison of GPAs and number of parents living with the Cadet using the Pearson product moment method of correlation was used. Table 1 contains data on the GPAs and number of parents living at home for 82 students used in the sample. The sums of all column totals are shown at the end of the table. All data was first tabulated by hand using a calculator and then verified using the computer program Statmost. The result to both tabulations was a positive correlation of .2626.

The statistical significance of this result was determined by comparing the value of Pearson's r with the .05 and .01 values found in Methods of Research in Education, Spring Edition, by John M. Ritz, DTE. The interpretation of the two variables will be presented in Chapter V.

TABLE 1
GPAs AND NUMBER OF PARENTS

Sample	Grade Point Average (GPA)		Number Parents living with Cadet		
	X	X2	Y	Y2	XY
S1	1.559	2.430	1	1	1.559
S2	1.857	3.448	1	1	1.857
S3	1.905	3.629	2	4	3.810
S4	1.905	3.629	1	1	1.905
S5	2.778	7.717	2	4	5.556
S6	1.857	3.448	1	1	1.857
S7	1.571	2.468	1	1	1.571
S8	2.333	5.443	2	4	4.666
S9	2.841	8.071	2	4	5.682
S10	2.041	4.166	1	1	2.041
S11	2.000	4.000	1	1	2.000
S12	1.300	1.690	2	4	2.600
S13	2.048	4.194	2	4	4.096
S14	2.114	4.469	2	4	4.228
S15	2.333	5.443	1	1	2.333
S16	1.943	3.775	1	1	1.943
S17	2.830	8.009	2	4	5.660
S18	2.150	4.623	2	4	4.300
S19	1.727	2.983	1	1	1.727
S20	3.095	9.579	2	4	6.190
S21	2.647	7.007	1	1	2.647
S22	2.000	4.000	2	4	4.000
S23	2.100	4.410	2	4	4.200
S24	1.429	2.042	1	1	1.429
S25	2.333	5.443	2	4	4.666
S26	2.727	7.437	2	4	5.454
S27	3.286	10.798	2	4	6.572
S28	2.973	8.839	2	4	5.946
S29	1.657	2.746	2	4	3.314
S30	1.286	1.654	2	4	2.572
S31	3.000	9.000	2	4	6.000
S32	2.000	4.000	1	1	2.000
S33	2.211	4.889	2	4	4.422
S34	2.000	4.000	1	1	2.000
S35	2.417	5.842	2	4	4.834

S36	3.719	13.831	2	4	7.438
S37	2.053	4.215	2	4	4.106
S38	2.545	6.477	2	4	5.090
S39	2.429	5.900	2	4	4.858
S40	2.800	7.840	2	4	5.600
S41	2.545	6.477	2	4	5.090
S42	1.667	2.779	1	1	1.667
S43	1.941	3.767	2	4	3.882
S44	3.143	9.878	2	4	6.286
S45	3.684	13.572	1	1	3.684
S46	2.000	4.000	1	1	2.000
S47	2.636	6.948	1	1	2.636
S48	2.739	7.502	2	4	5.478
S49	1.714	2.938	1	1	1.714
S50	2.150	4.623	2	4	4.300
S51	1.842	3.393	2	4	3.684
S52	2.152	4.631	2	4	4.304
S53	2.972	8.833	2	4	5.944
S54	1.143	1.306	2	4	2.286
S55	2.111	4.456	1	1	2.111
S56	1.571	2.468	2	4	3.142
S57	2.273	5.167	1	1	2.273
S58	2.158	4.657	1	1	2.158
S59	1.839	3.382	1	1	1.839
S60	3.250	10.563	2	4	6.500
S61	2.429	5.900	2	4	4.858
S62	2.619	6.859	1	1	2.619
S63	2.211	4.889	2	4	4.422
S64	2.219	4.924	1	1	2.219
S65	2.045	4.182	1	1	2.045
S66	2.957	8.744	2	4	5.914
S67	3.043	9.260	2	4	6.086
S68	2.778	7.717	2	4	5.556
S69	2.714	7.366	2	4	5.428
S70	.778	.605	2	4	1.556
S71	2.333	5.443	2	4	4.666
S72	2.286	5.226	2	4	4.572
S73	2.556	6.533	2	4	5.112
S74	3.186	10.151	2	4	6.372
S75	2.900	8.410	2	4	5.800
S76	1.714	2.938	2	4	3.428
S77	1.500	2.250	2	4	3.000
S78	2.125	4.516	2	4	4.250

S79	1.828	3.342	1	1	1.828
S80	1.800	3.240	2	4	3.600
S81	1.143	1.306	1	1	1.143
S82	2.700	7.290	1	1	2.700
----	-------	-------	---	---	-------
	185.193	446.015	135	241	310.881

The following Pearson's "r" formula is shown using the sums indicated:

$n = 82 \quad \sum x = 185.193 \quad \sum x^2 = 446.015 \quad \sum y = 135 \quad \sum y^2 = 241 \quad \sum xy = 310.881$

$$r = \frac{n\sum xy - \sum x \sum y}{\sqrt{[n\sum x^2 - (\sum x)^2]\ [n\sum y^2 - (\sum y)^2]}}$$

$$r = \frac{82(310.881) - (185.193 \times 135)}{\sqrt{[82(446.015) - (185.193)^2]\ [82(241) - (135)^2]}}$$

$$r = \frac{25492.242 - 25001.055}{\sqrt{(36573.23 - 34296.447)\ (19762 - 18225)}}$$

$$r = \frac{491.187}{\sqrt{2276.783 \times 1537}}$$

$$r = \frac{491.187}{1870.6724}$$

$$r = +.2626$$

SUMMARY

This chapter contained the discussion of the findings of the study with the analysis of the data collected presented. Table 1 showed the cumulative grade point average of all the students in the study and the number of parents living with that Cadet. Chapter V will present the summary, conclusions and recommendations of the study.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

In this chapter, the data presented is summarized, conclusions are drawn and practical recommendations are made for improving the findings as well as recommendations for future studies. The statistical degree of correlation between the GPAs and the number of parents living in the household of the Cadet is presented thereby testing the hypothesis used.

SUMMARY

The problem of this study was to determine if there is a statistical degree of relationship between the cumulative grade point averages and the number of parents living with the Maury High School NJROTC Cadet. The number of parents living with the students equated to the support they would be given with their studies. The following hypothesis was used in the study:

H1: Maury High School NJROTC Cadets will have a higher grade point average if they have two parents living at home with them.

In today's society, the family unit may not be one where both parents are living in the same household as the student. There may be as many different family unit make-ups as there are students in today's classrooms. If parents or guardians do not have the time, nor are available to help a student with academic requirements, the student will suffer in the end. Although this study was limited to the Maury High School NJROTC unit cadets who were enrolled during the second semester of the 1997 - 1998 school year,

the study could be generalized to any student population and the results could be studied as well.

In doing this study, the hypothesis stated was proven. Pearson's product moment correlation formula was used. To obtain the results of the formula, information was first obtained from course credit sheets which students received at the end of the first semester of the 1997 - 1998 school year. Student course credit sheets are filed in their permanent record in the guidance office and each student also receives their own personal copy of their sheet. See Appendix A for an example.

Second, this data was then compiled along with the number of parents living with each Cadet. A Cadet personal information card was used. These cards are filled out at the beginning of each semester. See Appendix B for an example. The purpose of comparing the two variables was to see if there is a statistical degree of relationship between the GPA and the number of parents living with the student. After all the data had been collected, the Pearson product moment method formula was used to see if there was a correlation between the variables. A table was used to show the cumulative GPAs of the Cadets as well as the number of parents living in the household.

CONCLUSIONS

In conclusion, the hypothesis shown below has been tested. After careful calculation of all data, the correlation was positive.

H1: There is a correlation between the grade point averages and the number of parents living with the Maury High School NJROTC Cadet.

Using the Pearson's r method of product moment correlation, the resulting r was + .2626. Using the level of significance for a one-tailed test, the data exceeds .1829 at the .05 level and it also exceeds .2565 at the .01 level. According to the table for the level of magnitude, a correlation value of low correlation; definite but small relationship is indicated with the + .2626 r value.

In comparing the GPAs of the Cadets with the number of parents living with the Cadet, there is a definite but small relationship between the two variables used in the study. Lower GPAs were associated with Cadets who had one or no parents living with them. The data showed that if two parents were living with the Cadet, the GPA was noticeably higher. A significant note of interest was that all but one Cadet with a GPA of 3.0 or higher was living with two parents. These Cadets were provided more support in their academic studies.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are made to help students to be more academically successful knowing the number of parents living with them and the support they receive.

1. All teachers need to know the background of each of their students. The more background information that is known about a student, the more a teacher is able to help them in the classroom. Understanding their background gives the teacher an idea what extra help and guidance the student may need to succeed in school. All teachers should be able to obtain this information at the beginning of each semester through the student or

through their counselor.

2. Student mentor programs should be put into place inside each classroom. This can be accomplished voluntarily or upon assignment by the teacher. A student helping another student works in more ways than just the completion of academic requirements alone. Social skills can be improved and friendships can be made furthering academic improvements.

3. Various parental support programs should be implemented by the administration. As an example, a letter should go to every household inviting all parents and guardians to visit the school at any given time. This invitation should not be limited to parent-teacher conferences nor PTA meetings held in the evenings. The more the parents are involved in a child's education, the better the child will perform. Look for a win-win situation.

4. All teachers should seek out ways to communicate with students who have one or no parents at home. Try to devise ways that students can come in early for help or stay late for tutoring. Develop home work clubs, peer assistance clubs, etc. to let students know they are cared for.

5. Communicate with other teachers that teach the same student but in different subjects. Ensure all teachers are on board with the extra assistance that may be needed to help these students succeed. When all teachers work as a team to help students succeed, another win-win situation should occur. When students see teachers working as a team, they should also benefit.

Additional studies should be undertaken to determine if parents would prefer

conferences and ceremonies in the evening. Since most parents work during the day, this would allow them to attend important meetings at school to discuss their child's academic strengths and weaknesses. Another study might be done within the school with all students to determine if they would join homework clubs or study improvement classes after the normal school day. This would require extra work for the teachers and administrators but in the long run, more students would be successful in their studies. Finding out what motivates a student to want to come to school and learn would be an important question in this study.

By getting involved in every student's education, the student, school, and society will benefit. Knowing what a student needs to be successful can significantly enhance the quality of education that a child needs to succeed in the world after they graduate high school. To this end, all teachers should be involved in their students education on a daily basis.

1441 E BAYVIEW BLVD
NORFOLK, VA 23503

(757)489-1612

DATE OF BIRTH - 04/13/1978 RACE/SEX - W/M

GRADE - 12 SCHOOL - 002 HOMEROOM - 422

NORFOLK PUBLIC SCHOOLS
CERTIFIED CREDIT SHEET

MAURY HIGH SCHOOL
322 SHIRLEY AVE.
NORFOLK, VA 23517
(757)441-2611 STATE CODE - 118-0010

DATE 02/21/1998

STUDENT NAME & I.D. NUMBER

	GRADE POINT AVG	CLASS RANK	CLASS SIZE
CUMULATIVE	2.830	PAGE 1 OF 1	
GRADES 9-11	2.674	128	343
GRADES 9-12**	2.830	110	346

> INDICATES WEIGHTED COURSE

GRADE OF R - COURSE RETAKEN AT LATER DATE

SUBJECT #	SUBJECT NAME	GRADE	CREDIT	TEACHER
	MAURY HIGH SCHOOL			
	GR. 9 1994-95 SEM. 1			
A6B	COMP 200	B	.50	BRAGG T L
BDA	SPAN 1/1	B	.50	GIL I
CC1	HONWDHIS1	C	.50	JAMISON B
D35	ALG I A	C	.50	CHASTEEN M
EEA	HONEARTH1	B	.50	BIDDLE R S
F15	HLTHPE9-1	B	.50	CARLSON M
HG3	KBAPL1	A	.50	RAKESTRAW
R01	NAVAL 1/1	C	.50	HENRY W D
	TOTAL CREDIT =		4	00
	MAURY HIGH SCHOOL			
	GR. 9 1994-95 SEM. 2			
ATB	MEAN CHAR	A	.50	MALEC C
BDB	SPAN 1/2	B	.50	BOUZIANE M
CZ1	HONWDHIS2	C	.50	BUHL J E
D36	ALG I B	A	.50	OLIVA J R
EEB	HONEARTH2	B	.50	BATES M J
F16	DRIVPE9-2	A	.50	JACOBS D C
F55	DREDCLASS	B		JACOBS D C
HG4	KBAPL 2	A	.50	KISER M L
R02	NAVAL 1/2	C	.50	WARREN J W
	TOTAL CREDIT =		4	00
	WASHINGTON HIGH SCHOOL			
	1994-95 SUM. SCH.			
A6C	COMP 300	A	.50	WILLIAMS G
	TOTAL CREDIT =		0	50
	MAURY HIGH SCHOOL			
	GR. 10 1995-96 SEM. 1			
AV3	INTRO LIT	C	.50	RUDDICK A
BDC	SPAN 2/1	B	.50	SAWYER E O
CU1	HON/HIST1	D	.50	RHUDY G F
D55	GEOM A	A	.50	PATTON L U
E86	HON BIO 1	D	.50	WARD-PETRO
F25	HTHPE10-1	A	.50	THORNTON J
R03	NAVAL 2/1	B	.50	WARREN J W
	TOTAL CREDIT =		3	50

SUBJECT #	SUBJECT NAME	GRADE	CREDIT	TEACHER
	MAURY HIGH SCHOOL			
	GR. 10 1995-96 SEM. 2			
A6G	REVIEWCOM	B	.50	MALEC C
BDD	SPAN 2/2	A	.50	WILLIAMS L
CS1	HON/HIST2	C	.50	RHUDY G F
D56	GEOM B	A	.50	STEINBERG
E86	GEN BIO 2	A	.50	BLY D A
F26	HTHPE10-2	A	.50	PANZIK P M
R04	NAVAL 2/2	A	.50	WARREN J W
	TOTAL CREDIT =		3	50
	MAURY HIGH SCHOOL			
	GR. 11 1996-97 SEM. 1			
A6F	ESSAYWRIT	E		MCPHEE C
BDE	SPAN 3/1	R		SAWYER E O
CV1	HON GOVT	C	.50	RHUDY G F
D66	HONALGIIA	R		HULL J M
EC3	CHEM 1	D	.50	GREEN H C
R05	NAVAL 3/1	A	.50	FOX L
	TOTAL CREDIT =		1	50
	MAURY HIGH SCHOOL			
	GR. 11 1996-97 SEM. 2			
AVB	CONTEMLIT	C	.50	ROSTIC T
BDF	SPAN 3/2	D	.50	SAWYER E O
CW1	FORPOLICY	C	.50	RHUDY G F
D69	HONALGIIB	D	.50	HULL J M
EC4	CHEM 2	D	.50	GREEN H C
R06	NAVAL 3/2	A	.50	FOX L
	TOTAL CREDIT =		3	00
	MAURY HIGH SCHOOL			
	GR. 12 1997-98 SEM. 1			
AV7	SURAMLIT	C	.50	BOOTHBY R
BDE	SPAN 3/1	A	.50	GIL I
D66	HONALGIIA	B	.50	HULL J M
DX1	PRIN FIN	B	.50	PATTON L U
HJ1	ACCOUNT 1	A	.50	KISER M L
R07	NAVAL 4/1	A	.50	FOX L
	TOTAL CREDIT =		3	00

SUBJECT #	SUBJECT NAME	GRADE	CREDIT	TEACHER

SUBJECT AREA	CREDITS REQUIRED	CREDITS EARNED
TOTAL ENGLISH	4.00	3.50
COMPOSITION	2.00	1.50
COMPOSITION 300	.50	1.00
LITERATURE	2.00	2.00
AM LITERATURE	.50	.50
TOTAL MATH	3.00	3.50
ALG SKILLS/ TOPICS	.50	.50
CONSUMER MATH	.50	.50
SCIENCE	2.00	3.00
TOTAL SOCIAL STUDIES	3.00	3.00
WORLD STUDIES	1.00	1.00
SURVEY	.50	.50
US/VA HISTORY	1.00	1.00
SURVEY	.50	.50
GOVERNMENT	1.00	1.00
SURVEY	.50	.50
FOREIGN LANGUAGE		3.00
PHYSICAL EDUCATION	2.00	2.00
TOTAL ELECTIVES		5.00
FINE/PRACT ARTS	1.00	1.00
TOTAL	22.00	23.00

** THROUGH FIRST SEMESTER OF SENIOR YEAR

SCHOOL YEAR	DAYS MEMBERSHIP	DAYS ABSENT
1994	179	3
1995	179	
1996	180	
1997	180	2

LITERACY PASSPORT
TEST - PASSED/SCORE

READING - YES/299
WRITING - YES/264
MATH - YES/277

SAT 06/97 R VERBAL-560 MATH-580
SAT 01/98 R VERBAL-590 MATH-640

TYPE OF DIPLOMA

GRADUATION DATE

MINIMUM PASSING SCORE 70

SKILLED - YES
COMPUTER LITERATE - YES
002

Norfolk Public Schools

STUDENT NAME & I.D. NUMBER

STUDENT RECORD

INFORMATION ON NPS STUDENTS MAY BE CONFIDENTIAL. CONSULT PUPIL PERSONNEL DEPARTMENT BEFORE RELEASING.

SCHOOL YEAR 19___/ 19___ Student Signature _____

Student Number _____ Insurance Paid _____

Name Tag _____

Student Name _____
Last First Middle

Race/Sex Code (Circle One) 1-WM 2-WF 3-BM 4-BF 5-OM 6-OF

Social Security Number _____ Home Phone Number _____

Birth Place _____ Date of Birth _____
(City/State)

Year of Graduation _____ Current Homeroom _____

Parent/Legal Guardian Name _____ Relationship M-Mother P-Parents F-Father G-Guardian (Circle One)

Work Phone Number of Parent/Guardian _____

Work Location _____

Home Address _____ Zip _____
(City/State)

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